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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10:055,689	01/23/2002	Fumihiko Koba	NEC NE254	8772

7590 05/14/2003

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EXAMINER

YOUNG, CHRISTOPHER G

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 05/14/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/055,689

Applicant(s)

Koba

Examiner

Young

Group Art Unit

1756

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE —3— MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 1/23/02
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-9 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-9 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 2 ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other _____

Office Action Summary

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1. This Office action is responsive to the Information Disclosure Statement (Paper No. 2) and the priority papers (Paper No. 3) both filed January 23, 2002.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) The invention was described in (1) an application for patent, published under Section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 1, 2, 4, 5, 7 and 8 are rejected under 35 U.S.C. § 102(e) as being anticipated by Yamashita et al.

The scope of the protection sought is anticipated by Yamashita et al. Specifically see column 3, lines 26-32 and claims 1 and 2.

4. Claims 1-9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamashita et al.

The scope of the protection sought through claims 1, 2, 4, 5, 7 and 8 is anticipated as set forth in paragraph No. 3 above. However, the scope of claims 3, 6 and 9 is rendered prima facie obvious in view of the teachings of Yamashita et al. in view of one of ordinary skill in the requisite art's ability. A careful review of the entire document, specifically column 3, lines 26-32 and the claims, shows that an electron beam projection mask for arranging a plurality of batch projection regions so that the pattern density may be equalized all over a semiconductor substrate is clearly taught. The reference also teaches the use of stencil type masks in this application. The reference is silent, however, to the electron beam projection mask being of a membrane type. This is the only teaching that is lacking in the reference. Although this is true, one of ordinary skill in the requisite art would have found it prima facie obvious to apply the teachings of Yamashita et al. to a membrane type mask with a reasonable expectation of obtaining a highly

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useful electron beam projection mask for arranging a plurality of batch projection regions with equalized pattern density all over a semiconductor substrate absent objective evidence of high probative value to the contrary. This is motivated by the fact that stencil type masks and membrane type masks are interchangeably used within the art for electron beam exposure.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Young, whose telephone number is (703) 308-2984. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff, can be reached on (703) 308-2464. A Fax communication that is for a non-final fax should be sent to (703) 872-9310. An after final fax should be sent to (703) 872-9311.

Any inquiry of general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.



Christopher G. Young
Primary Examiner
Art Unit 1756

C. Young:cdc
May 8, 2003